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| APPLICATION NO.                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/209,900                                     | 12/11/1998  | HIDEAKI TANI         | SUSU113236          | 6354             |
| 26389  | 7590        | 11/04/2004           | EXAMINER            |                  |
| CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC |             |                      | RYMAN, DANIEL J     |                  |
| 1420 FIFTH AVENUE                              |             |                      | ART UNIT            |                  |
| SUITE 2800                                     |             |                      | PAPER NUMBER        |                  |
| SEATTLE, WA 98101-2347                         |             |                      | 2665                |                  |

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/209,900             | TANI ET AL.         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Daniel J. Ryman        | 2665                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 55-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments with respect to claims 55-68 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 55-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (USPN 5,940,387) in view of Ito et al (USPN 6,014,693) in further view of Barton et al. (USPN 6,233,389).
4. Regarding claims 55, 56, 58, and 60, Humpleman discloses a stream distribution system comprising a stream distribution server (ref. 30: entrance unit), a plurality of terminal devices each having an information reproduction function (televisions), and a local area network connecting the stream distribution server and the terminal devices (digital network installed in the home), wherein the stream distribution server comprises: at least two receptors (NTU) each for receiving stream data transmitted through a broadcasting network and stream data transmitted through a communication network, the stream data comprising information arranged in packets, and a packet identifier being added to each packet (col. 1, line 66-col. 2, line 26 and col. 3, lines 18-32); a selector for selecting a predetermined unit of information from the stream data received by the receptors according to a distribution request received from each of the terminal devices,

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for mixing the information received from the broadcasting network and the communication network, and for branching the information to a transmitter and a file I/O controller (col. 2, lines 10-16 and col. 3, lines 18-40) where it is implicit that a selector is used to select data from a broadcast network and a mixer is used to mix the information from the different networks; the transmitter selectively transmitting the information received from the selector to each of the terminal devices (col. 3, lines 18-40 and col. 3, line 53-col. 4, line 14); and the file I/O controller for controlling a file device and for outputting the information received from the selector to the file device (col. 3, lines 18-40 and col. 3, line 53-col. 4, line 14).

Humpleman does not expressly disclose that the transmitter comprises a filter for adjusting a transmission band of the information to be sent to each of the terminal devices so as to selectively transmit the information received from the selector to each of the terminal devices according to data transmission band availability within the local area network so that the information received from the selector by the transmitter is adjusted to correspond to the limited transmission band and the adjusted information is transmitted to the terminal device, while the information received from the selector by the file I/O controller is unadjusted and stored in the file device. However, Humpleman does disclose that the information can comprise compressed and uncompressed data (col. 3, lines 28-31 and col. 3, line 66-col. 4, line 7). Humpleman also teaches connecting the file I/O device (DVCR) to a high-speed line in order to ensure continuous data transfer to the I/O device (col. 4, lines 14-29) where it is implicit that this is done in order to ensure that the stored information can be reproduced at the highest possible quality (the information received from the selector by the file I/O controller is unadjusted and stored in the file device). Ito teaches, in an information distribution system, having a transmitter comprise a

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filter (video index) for adjusting a transmission band of the information to be sent to terminal devices so as to selectively transmit the information to the terminal devices according to data transmission band availability within the local area network (col. 2, line 60-col. 3, line 20) where filter means is broadly interpreted to mean the video index which filters the data stream according to rate instructions. Ito also teaches adjusting received information to correspond to the limited transmission band and the transmitting the adjusted information to a terminal device in order to compensate for high network load (col. 2, line 46-col. 4, line 40). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust a transmission band of the information to be sent to terminal devices so as to selectively transmit the information to the terminal devices according to data transmission band availability within the local area network in order to allow the network to handle high loads while maintaining high quality. As such, Humpleman in view of Ito suggests having the transmitter comprise a filter for adjusting a transmission band of the information to be sent to each of the terminal devices so as to selectively transmit the information received from the selector to each of the terminal devices according to data transmission band availability within the local area network so that the information received from the selector by the transmitter is adjusted to correspond to the limited transmission band and the adjusted information is transmitted to the terminal device, while the information received from the selector by the file I/O controller is unadjusted and stored in the file device in order to transmit data over a congested transmission network at the highest possible quality while ensuring that any stored information can be reproduced at the highest possible quality.

Humpleman in view of Ito does not expressly disclose that the selector outputs the information to both the transmitter and the file I/O controller at the same time. Barton teaches, in a stream distribution system, having a selector outputs the information to both a transmitter and a file I/O controller at the same time in order to permit a viewer to view a television broadcast program with the option instantly review previous scenes in the program (col. 1, line 63-col. 2, line 38). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the selector output the information to both a transmitter and a file I/O controller at the same time in order to permit a viewer to view a television broadcast program with the option instantly review previous scenes in the program.

5. Regarding claim 57, referring to claim 55, Humpleman in view of Ito in further view of Barton discloses that the stream data transmitted through the external network comprise information arranged in packets, and a packet identifier is added to each packet; and the selector selects the predetermined unit of information from the stream data by referring to the packet identifiers. (Humpleman: col. 2, lines 5-9; col. 3, line 59-col. 4, line 13; col. 10, lines 24-29; and col. 11, lines 11-30).

6. Regarding claim 59, referring to claim 55, Humpleman in view of Ito in further view of Barton suggests that the selector outputs the stream data to the file I/O controller upon receiving a recording request from one of the terminal devices (Humpleman: col. 2, lines 10-16; col. 3, lines 18-40; and col. 3, line 59-col. 4, line 9).

7. Regarding claim 61, referring to claim 60, Humpleman in view of Ito in further view of Barton suggests that the file I/O controller outputs the information stored in the file device back to the selector according to a storage data reading request received from one of the terminal

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devices (Humpleman: col. 2, lines 10-16; col. 3, lines 18-40; and col. 3, line 59-col. 4, line 9 and Ito: col. 5, lines 17-23).

8. Regarding claim 62, referring to claim 60, Humpleman in view of Ito in further view of Barton discloses that the filter comprises a priority table correlating each of the packet identifiers with a packet priority; and the filter refers to the priority table to determine the packet priority of each of the packets and adjusts a transmission band of the information to be sent to each of the terminal devices by performing packet filtering based on the packet priority (Ito: Fig. 3; col. 2, line 46-col. 4, line 40; and col. 5, line 51-col. 6, line 18).

9. Regarding claim 63, referring to claim 62, Humpleman in view of Ito in further view of Barton discloses a band limitation setter for setting a limitation on the data transmission band allocated to each of the terminal devices according to the use state of the local area network and for constructing the priority table in the filter; wherein the transmitter selectively transmits the information received from the selector to each of the terminal devices according to the limitation set on the data transmission band allocated to each of the terminal devices and by using the filter (Humpleman: col. 2, lines 10-16 and col. 3, lines 18-40 and Ito: Fig. 3; col. 2, line 46-col. 4, line 40; and col. 5, line 51-col. 6, line 18).

10. Regarding claim 64, referring to claim 63, Humpleman in view of Ito in further view of Barton suggests that the band limitation setter controls the file I/O controller and the transmitter, and upon receiving a storage data reading request from one of the terminal devices, causes the transmission of the stream data stored in the file device via the selector and the transmitter to the terminal device (Humpleman: col. 2, lines 10-26; col. 3, lines 5-45; and col. 7, lines 31-50 and Ito: Fig. 3; col. 2, line 46-col. 4, line 40; and col. 5, line 51-col. 6, line 18).

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11. Regarding claim 65, referring to claim 63, Humpleman in view of Ito in further view of Barton suggests that the band limitation setter, upon receiving a distribution request from one of the terminal devices, changes a branch setting of the selector, and the selector outputs the stream data received from the receptors to the transmitter (Humpleman: col. 2, lines 10-26; col. 3, lines 5-45; and col. 7, lines 31-50).

12. Regarding claim 66, referring to claim 63, Humpleman in view of Ito in further view of Barton suggests that the band limitation setter, upon receiving a recording request from one of the terminal devices, changes a branch setting of the selector, and the selector outputs the stream data received from the receptors to the file I/O controller (Humpleman: col. 2, lines 10-16; col. 3, lines 18-40; and col. 3, line 59-col. 4, line 4 and Ito: Fig. 3; col. 2, line 46-col. 4, line 40; and col. 5, line 51-col. 6, line 18).

13. Claims 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (USPN 5,940,387) in view of Ito et al (USPN 6,014,693) in further view of Barton et al. (USPN 6,233,389) as applied to claim 63 above, and further in view of Budow et al (USPN 5,625,864) in further view of Blahut et al (USPN 5,442,389).

14. Regarding claim 67, referring to claim 63, Humpleman in view of Ito in further view of Barton does not expressly disclose that the selector further comprises means for setting a flag to control transmission of the stream data to each of the terminal devices, the means turning off the flag upon receiving a pause request from one of the terminal devices to pause the transmission of the stream data to the terminal device, and turning on the flag upon receiving a resume request from the terminal device to resume the transmission of the stream data to the terminal device. Budow teaches, in a information distribution system, having a selector that accepts a pause



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request or a resume request from the user and having the selector pause transmission of the stream data to the terminal device according to the pause request and restart transmission of the stream data according to the resume request in order to allow a user to pause a program (col. 3, lines 4-16; col. 4, lines 30-67; col. 5, lines 36-51; and col. 6, lines 25-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to have a setting part that accepts a pause request or a resume request from the user and to have the selector pause transmission of the stream data to the terminal device according to the pause request and restarts transmission of the stream data according to the resume request in order to allow a user to pause a program. Humpleman in view of Ito in further view of Barton in further view of Budow does not disclose that the selector comprises means for setting a flag to control transmission of the stream data to each of the terminal devices, the means turning off the flag upon receiving a pause request and turning on the flag upon receiving a resume request. Blahut discloses, in a system for transmitting video information, having a flag in a packet indicate whether or not the transmission is paused (col. 8, lines 55-56) where it is implicit that the flag is used in order to control the pause function. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the selector comprises means for setting a flag to control transmission of the stream data to each of the terminal devices, the means turning off the flag upon receiving a pause request and turning on the flag upon receiving a resume request in order to control the pause function.

15. Regarding claim 68, referring to claim 67, Humpleman in view of Ito in further view of Barton in further view of Budow in further view of Blahut suggests that the band limitation setter comprises means for controlling the selector and the file I/O controller upon receiving a pause

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request or a resume request from one of the terminal devices, the means upon receiving a pause request interrupting transmission of the stream data to the terminal device and storing the stream data instead in the file device via the file I/O controller, and the means upon receiving a resume request reading the stream data stored in the file device based on a first-in-first-out processing in parallel with continuously storing the stream data in the file device and transmitting the read-out stream data to the terminal device via the selector and the transmitter (Humbleman: col. 2, lines 10-26; col. 3, lines 5-45; and col. 7, lines 31-50; Budow: col. 3, lines 4-16; col. 4, lines 30-43; col. 4, lines 64-67; col. 5, lines 36-51; col. 8, line 59-col. 9, line 41; col. 12, lines 29-64; and col. 15, lines 54-62; Ito: Fig. 3; col. 2, line 46-col. 4, line 40; and col. 5, line 51-col. 6, line 18; and Blahut: col. 8, lines 55-56).

### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Liew et al (USPN 5,734,677) see col. 13, lines 58-63 which teaches using filters to perform coding and compression. Hluchyj et al (USPN 5,115,429) see col. 2, line 49-col. 3, line 17 which discloses varying a coding rate of a stream in response to the loading condition of a network.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel J. Ryman  
Examiner  
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